

AMENDMENTS TO THE CLAIMS:

Please cancel claims 1, 6, 7, 11, 20, 21 and 25-30 without prejudice. Kindly amend claims 2-5, 8-10, 12-19, and 22-24, as shown below. Please add new claims 31-53, as shown below.

This listing of claims will replace all prior versions and listings of claims in the Application:

Claim 1 (canceled)

Claim 2 (currently amended): A thermocouple junction box as claimed in claim [[1]] 8, wherein said cup is electrically connected to a thermocouple sensing junction.

Claim 3 (currently amended): A thermocouple junction box as claimed in claim [[1]] 8, wherein said stud is threaded.

Claim 4 (currently amended): A thermocouple junction box as claimed in claim [[1]] 8, wherein said cup comprises type K metal.

Claim 5 (currently amended): A thermocouple junction box as claimed in claim [[1]] 8, wherein said stud comprises stainless steel.

Claim 6 (canceled)

Claim 7 (canceled)

Claim 8 (currently amended): A thermocouple junction box as claimed in claim 6, comprising:

a metallic cup electrically connected to a thermocouple sensing junction;

a stud disposed, at least in part, within said cup, said stud being electrically isolated

from said cup, and

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a conductive element electrically connected to a thermocouple cable and movably disposed along the length of said stud,
wherein said conductive element is a washer or lug, and
wherein said conductive element comprises a non-conductive portion, said non-conductive portion being in contact with said stud when said conductive element is disposed on said stud.

Claim 9 (currently amended): A thermocouple junction box ~~as claimed in claim 6,~~
~~further comprising:~~

a metallic cup electrically connected to a thermocouple sensing junction;
a stud disposed, at least in part, within said cup, said stud being electrically isolated
from said cup, and

a conductive element electrically connected to a thermocouple cable and movably
disposed along the length of said stud, and

an insulating element independently movably disposed along said stud with respect to said conductive element, said insulating element electrically isolating said conductive element from said stud[[.]],

wherein said conductive element is a washer or lug.

Claim 10 (currently amended): A thermocouple junction box ~~as claimed in claim 9,~~
~~comprising:~~

a metallic cup electrically connected to a thermocouple sensing junction;

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a stud disposed, at least in part, within said cup, said stud being electrically isolated from said cup, and

a conductive element electrically connected to a thermocouple cable and movably disposed along the length of said stud, wherein said conductive element is a washer or lug, wherein said insulating element has an annular shape.

Claim 11 (canceled)

Claim 12 (currently amended): A thermocouple junction box as claimed in claim [[11]] 22, wherein said stud is connected to said contact element by means of friction or interference fit with said insulating material or by means of oxide bonding.

Claim 13 (currently amended): A thermocouple junction box as claimed in claim [[11]] 22, wherein said stud is connected to said contact element by means of brazing or welding to said insulating material.

Claim 14 (currently amended): A thermocouple junction box as claimed in claim [[11]] 22, wherein said insulating material has an annular shape.

Claim 15 (currently amended): A thermocouple junction box as claimed in claim [[11]] 22, wherein said contact element comprises type K metal.

Claim 16 (currently amended): A thermocouple junction box as claimed in claim [[11]] 22, wherein said stud comprises stainless steel.

Claim 17 (currently amended): A thermocouple junction box as claimed in claim [11] 22, wherein said contact element is cup-shaped.

Claim 18 (currently amended): A thermocouple junction box as claimed in claim [[11]] 22, wherein said contact element is connected to a thermocouple sensing junction.

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Claim 19 (currently amended): A thermocouple junction box as claimed in claim [[11]] 22, wherein said stud is threaded.

Claim 20 (canceled)

Claim 21 (canceled)

Claim 22 (currently amended): A thermocouple junction box comprising:
a metallic contact element electrically connected to a thermocouple sensing junction;
a stud mechanically coupled to said contact element by means of an insulating material
and electrically isolated from said contact element by means of said insulating material,
a conductive element electrically connected to a thermocouple cable and movably
disposed along the length of said stud,

~~A thermocouple junction box as claimed in claim 20~~, wherein said conductive element comprises a non-conductive portion, said non-conductive portion being in contact with said stud when said conductive element is disposed on said stud.

Claim 23 (currently amended): A thermocouple junction box as claimed in claim 20,
further comprising:

a metallic contact element electrically connected to a thermocouple sensing junction,
a stud mechanically coupled to said contact element by means of an insulating material
and electrically isolated from said contact element by means of said insulating material,
a conductive element electrically connected to a thermocouple cable and movably
disposed along the length of said stud, and

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an insulating element independently movably disposed along said stud with respect to said conductive element, said insulating element electrically isolating said conductive element from said stud.

Claim 24 (currently amended): A thermocouple junction box ~~as claimed in claim 23,~~
comprising:

a metallic contact element electrically connected to a thermocouple sensing junction;
a stud mechanically coupled to said contact element by means of an insulating material
and electrically isolated from said contact element by means of said insulating material, and
a conductive element electrically connected to a thermocouple cable and movably
disposed along the length of said stud,

wherein said insulating element has an annular shape.

Claim 25-30 (canceled)

Claims 31 (new): A thermocouple junction box as claimed in claim 9, wherein said cup is electrically connected to a thermocouple sensing junction.

Claim 32 (new): A thermocouple junction box as claimed in claim 9, wherein said stud is threaded.

Claim 33 (new): A thermocouple junction box as claimed in claim 9, wherein said cup comprises type K metal.

Claim 34 (new): A thermocouple junction box as claimed in claim 9, wherein said stud comprises stainless steel.

Claim 35 (new): A thermocouple junction box as claimed in claim 10, wherein said cup is electrically connected to a thermocouple sensing junction.

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Claim 36 (new): A thermocouple junction box as claimed in claim 10, wherein said stud is threaded.

Claim 37 (new): A thermocouple junction box as claimed in claim 10, wherein said cup comprises type K metal.

Claim 38 (new): A thermocouple junction box as claimed in claim 10, wherein said stud comprises stainless steel.

Claim 39 (new): A thermocouple junction box as claimed in claim 23, wherein said stud is connected to said contact element by means of friction or interference fit with said insulating material or by means of oxide bonding.

Claim 40 (new): A thermocouple junction box as claimed in claim 23, wherein said stud is connected to said contact element by means of brazing or welding to said insulating material.

Claim 41 (new): A thermocouple junction box as claimed in claim 23, wherein said insulating material has an annular shape.

Claim 42 (new): A thermocouple junction box as claimed in claim 23, wherein said contact element comprises type K metal.

Claim 43 (new): A thermocouple junction box as claimed in claim 23, wherein said stud comprises stainless steel.

Claim 44 (new): A thermocouple junction box as claimed in claim 23, wherein said contact element is cup-shaped.

Claim 45 (new): A thermocouple junction box as claimed in claim 23, wherein said contact element is connected to a thermocouple sensing junction.

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Claim 46 (new): A thermocouple junction box as claimed in claim 23, wherein said stud is threaded.

Claim 47 (new): A thermocouple junction box as claimed in claim 24, wherein said stud is connected to said contact element by means of friction or interference fit with said insulating material or by means of oxide bonding.

Claim 48 (new): A thermocouple junction box as claimed in claim 24, wherein said stud is connected to said contact element by means of brazing or welding to said insulating material.

Claim 49 (new): A thermocouple junction box as claimed in claim 24, wherein said contact element comprises type K metal.

Claim 50 (new): A thermocouple junction box as claimed in claim 24, wherein said stud comprises stainless steel.

Claim 51 (new): A thermocouple junction box as claimed in claim 24, wherein said contact element is cup-shaped.

Claim 52 (new): A thermocouple junction box as claimed in claim 24, wherein said contact element is connected to a thermocouple sensing junction.

Claim 53 (new): A thermocouple junction box as claimed in claim 24, wherein said stud is threaded.

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